Nuclear Science Wall Chart

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Just over a century ago, nuclear physics began with the discovery of radioactivity. Now a hundred years later, The Contemporary Physics Education Project (CPEP) has developed a wall chart on nuclear science to bring contemporary Nuclear Science into the classroom.

For several years scientists at LBNL have been working on this chart. In the summer of 1996, the group expanded to include other institutions and then joined CPEP to create a wall chart that would be useful for high school and college teachers. After several national meetings, the chart was sent to teachers and nuclear researchers throughout the world. The feedback from this field test was incorporated in the final version. An almost complete version was sent to about 10,000 teachers in the December 1997 edition of *The Physics Teacher*.[1]

The chart illustrates the traditional areas of radioactive decay, fission and fusion. It supplements this usual classroom material with the Chart of the Nuclides and some practical applications of nuclear science.

Furthermore, it shows some of the active research fields. It depicts how the newest element 112 was discovered at GSI. In shows the quark structure of the nucleus which is being probed at the Jefferson Laboratory. It includes the phase diagram of nuclear matter which includes the quark-gluon plasma. It also describes the solar neutrino puzzle.

This chart has just been printed and is available for distribution. It will be accompanied by a teacher's guide with background information on the chart and on contemporary aspects of nuclear physics and chemistry.

Footnotes and References

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1. G.J. Aubrecht *et al.*, The Physics Teacher **35**, 544 (1997).

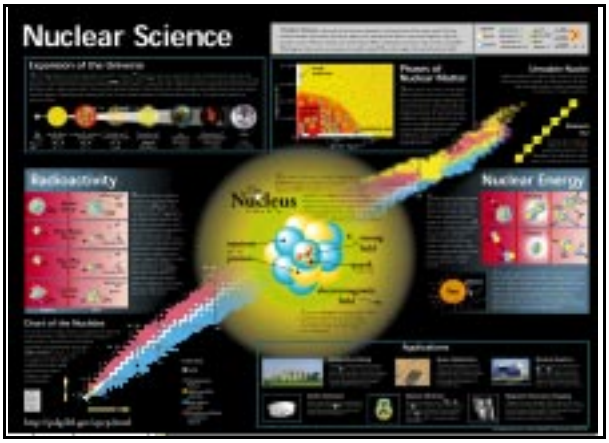

Fig. 1. Final version of the Nuclear Science Wall Chart.